

1.9 in 0.5 E03 /25 Pourse GENERAL ELECTRIC COMPANY... SYRACUSE, NEW YORK 13221

ELECTRONICS PARK,

ELECTRONIC SYSTEMS RELATIONS AND UTILITIES OPERATION

Building 9, Room 101 Electronics Park

December 27, 1982

Mr. Ernest A. Regna, Chief Solid Waste Branch Environmental Protection Agency Region II, Air & Waste Management Division Solid Waste Branch 26 Federal Plaza New York, New York 10278

Re: Facility Inspection 40 CFR Part 265 Standards ID #NYD059385120

Dear Mr. Regna:

This is in response to your report of inspection of the referenced facility received October 27, 1982.

The following comments and enclosed exhibits are submitted in reference to the RCRA Inspection Form and to the sections of the regulation for which we have been cited.

40 CFR 265.13(b) $\frac{265.13-3(d)}{Generation}$ - See Exhibit A - Hazardous Waste Management Plan - Section II. A. - Generation, Waste Analysis. Frequency of repeated analysis is annually or more

frequently if necessary to ensure that it is accurate and up to date. - See Exhibit B - All hazardous wastes received from the Court Street

40 CFR 265.14 265.14 - The Warning Signs have been replaced with signs reading "Danger-Unauthorized Personnel Keep Out".

and Farrell Road Plants are accompanied by the certification shown.

40 CFR 265.16(d) 265.16 - 1 Thru 3 - See Exhibit C - RCRA Personnel Training Program. program has been implemented.

continued ...

AN EQUAL OPPORTUNITY EMPLOYER





Mr. Ernest A. Regna, Chief Page 2 12/27/82

40 CFR 265.32

265.32 - An alarm which activates a siren in the facility and a bell in the plant patrol office, which is manned 24 hours a day, every day of the year, has been installed in the container storage area. It can be set off by pulling a lever on the box which is located within the storage facility.

40 CFR 265.35

265.35 - See Exhibit D - A new procedure has been adopted for arranging the drums within the ignitables storage area as shown so that adequate aisle space will be maintained.

40 CFR 265.73

265.73 - See Exhibit E - The operating record has been consolidated into two notebooks.

40 CFR 265.112

265.112 - See Exhibit F - Method of clean up has been added to the Plan.

 $\frac{40\ \text{CFR 265} - \text{Subpart I}}{265.\text{I}-2}$ - Containment system for spills, leaks and precipitation is comprised of the following:

> Gutters to Trench to

Separate Underground Tank

This letter and enclosures constitute confirmation that the violations listed in your letter dated October 25, 1982 have been corrected.

Sincerely yours,

Barry L. Pickard, P.E.

Plant Engineer,

Environmental Systems

BLP/mv

enc1.

cc: Thomas Taccone, Permits Admin. Branch

	Subject requirement	40 CFR section Nos.	References	Location in application	Comments
C-a	2d Frequency of Analysis	264. 13(b)(4)			
	A description of the frequency at which the analyses will be repeated. For an on-site facility this will be whenever there is a process change or as often as required to verify consistency of the waste feed.		•		
C-2		264.13(b)(5) 264.13(c)	40 CFR 261, Appendix I; Ref. 8, Ch. 9.5; Ref. 34, Sec. 4.2.3; Ref. 36,		
	A description of the procedures used to in- spect and/or analyze wastes generated offsite that includes procedures to determine their identity and sampling methods used. Also information supplied by generator.		Sec. 4.0; Ref. 39; Ref. 40, Ch. V; Ref. 41, Part 3; Ref. 42, Part III		
C-2		264 13(h)(6) 264.17	•		
	If the facility stores or treats ignitable, reactive, or incompatible waste, a description of methods which will be used to meet the additional waste analsis requirements necessary for complying with the regulatory requirements for these types of hazardous waste.				
ART	D - PROCESS INFORMATION				
-1	Containers				
0-1	a Containers with Free Liquids				
	1-la(1) Description of Containers	122.25(b)(1)(1)(A) 264.171 264.172	Refs. 90-93		
	material Dimensions and useable volume Liner specifications Condition of containers Manufacturer specifications Determination of compatibility of wastes and containers with description of how compatibility is determined such as trial mixing of waste in containers.				4.

-17- 4

Subject requirement		40 FFD section Nos.	References	Location in application	Comments	
D-1a(2) Cont A de prace Wa de re Come On A de re On On A de re On On A de re On On On A de re On On On On On On On On On O	A description of container management practices Maste containers are always kept closed during storage, except when adding or removing waste. Containers must not be stored in a manner that may cause them to rupture or to leak. Adequately separated for inspection Aisle space Maximum number, height, volume, and types of containers in storage area Locations of ignitable, reactive, or incompatible wastes Machinery, equipment and procedures used to move containers					
D-1a(3) Secc. Open A de of (syst) De company Le company De company Le company De co	ondary Containment System Design and ration escription of the design and operation the container storage area containment tems showing: esign drawing of containment system apacity of system to hold spills, eats, precipitation imensions ocation of storage areas iquid collection system and location f sump escription of base grade and slope escription of curbs, dikes, berms, itches, and trenches					
B-1a(3)(a)	Requirement for the Base to Contain Liquids The base under the containers must be free of cracks or gaps and sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed. The applicant should address: Construction and characteristics of base materials Engineering evaluation of base structural integrity Compatibility of base or liner	264. 175(b)(1)	Ref. 90; Ref. 94; Ref. 95			t

Subject	requirement	40 CFR section Nos.	References	Location in application	Comments		
D-1a(3)(b)	Containment System Drainage The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or otherwise protected from contact with accumulated liquids. For this requirement the applicant should address	122.25(b)(1)(1)(B) 264.175(b)(2)	Ref. 90; Ref. 96; Ref. 97				
	where applicable: Describe handling and stacking practices Grading of base Drainage design and removal system so that standing liquid does not remain on base longer than one hour after a leakage or precipitation event.						
D-1a(3)(c)	Containment System Capacity The containment system must have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater. Information that should be included to satisfy this requirement is:	122.25(b)(1)(1)(C) 264.175(b)(3)	Ref. 90; Refs. 96-98	,			
	 Volume of largest container Total volume of containers Containment structure capacity Capacity of run-off collection system Geographic storm intensity/frequency data 						
D-1a(3)(d)	Control of Run-on Run-on into the containment system must be prevented, unless the collection system has sufficient excess capacity in addition to that required in the above paragraph to contain any run-on that might enter the system. The applicant should discuss structures used to control run-on such as:	122.25(b)(1)(†)(D) 264.175(b)(4)	Ref. 90; Ref. 94; Ref. 95; Ref. 98			t.	

Subject requirement	40 CFR section Nos.	References	Location in application	Comments	
Containment system auxiliary structures (curbs, dikes, etc.) Engineering grading design Collection and removal system design capacity Potential run-on Demonstration that system has adequate capacity to handle run-on from precipitation event in addition to 10% of the volume of containers or the largest container whichever is greater.				- V - - -	
0-1a(4) Removal of Liquids from Containment System	122.25(b)(1)(1)(E) 264.175(b)(5)	Ref. 34; Ref. 35; Ref. 90; Ref. 97			
Spilled or leaked waste and accumulate precipitation must be removed from the sump or collection area in a timely manner to prevent overflow of the containment system. Information that should be included when describing removal of accumulated liquids is:					
 How liquids will be analyzed Removal equipment and methods (sump pump design, piping specifications, location, discharge point and capacity) Management of accumulated liquid including prevention of overflow 				·	
-1b Containers Without Free Liquids					
B-1b(1) Test for Free Liquids for areas that store containers of wastes that do not contain free liquid the test procedures and results or other documentation or information showing that the wastes do not contain free liquids.		40 CFR 265.314 Federal Register 8311 February 25, 1982			
P-1b(2) Description of Containers A description of the facility primary containment devices that includes basic design parameters, dimensions, materials of construction, and demonstration of compatibility of waste with containers. Information submitte	264. 171 264. 172	Refs. 90-93			

Subject requirement	40 CFR section Hos.	References	Location in application	Comments	
• Types of container(s) and construction material • Dimensions and useable volume • Liner specifications • Container condition • Manufacturer specifications • Determination of compatibility of wastes and container with description of how compatibility is determined such as trial mixing of waste in containers		*			
D-1b(3) Container Management Practices	264.173	Ref. 90			
A description of container management practices:					
Waste containers are always kept closed during storage except when adding or removing waste. Containers are not opened, handled, or stored in a manner that may cause the container to rupture or to leak. Adequately separated for inspection. Aisle space. Maximum number, height, volume, and types of containers in storage area tocation of ignitable, reactive, and incompatible waste.		•			
D-1b(4) Container Storage Area Drainage The storage area must be sloped or otherwise designed to drain and remove liquid resulting from precipitation Design drawing showing location of hazardous waste and dimensions Description of stacking practices Base slope Drainage design and removal system	122.25(b)(1)(ff)(B) 264.175(c)	Ref. 90; Ref. 96; Ref. 97			
0-2 Tanks					
D-2a Description of Tanks A review of tank design specifications to assure that the tanks will not collapse or rupture. The specifications to be reviewed include shell strength, capacity, pressure controls, foundation, structural support, and seams sufficient to demonstrate that tank will not collapse or rupture. Specifically the applicant should address such items as:	122.25(b)(2) 264.191	Ref. 23; Ref. 24; Ref. 26; Ref. 27; Ref. 28; Ref. 29 Ref. 99		ž*.	

	Subject requirement	40 CFR section Nos.	References	tocation in application	Comments	
	 Types and number of tanks Tank wall thickness Tank internal pressure and pressure controls Foundation construction, specifications, and structural supports Tank design specifications including dimensions, capacity, design, shell thickness, material and method of construction Tank design standard code and year Specifications on seams 					
	 Operating pressure and temperature Type of waste contained in tanks Specific gravity of tank liquids Maximum height of liquid level 		,			
0-2b	Tank Corrosion and Erosion	122.25(b)(2)(11) 264.192(a)	Ref. 91; Ref. 99			
	A review of the pertinent characteristics of the tank construction material and lining materials to determine corrosion or erosion effects with wastes and other materials (i.e., treatment reagents). The applicant should also address:					
	 Description of lining and coating materials Corrosion allowance and corrosion and erosion rates. Demonstration of how minimum shell thickness will be maintained Tank construction compatibility with waste and tests or documentation to substantiate compatibility Description of treatment reagents 					
D-2c	Tank Management Practices A description of the tank owner's or operator's operating practices and controls:	122.25(b)(2)(1v) and (v) 264.192(b)	Ref. 99			
	 Description of controls to prevent overfilling and overtopping such as waste feed cut-off system(s), by-pass or standby tank Demonstration of maintenance of sufficient freeboard to prevent overtopping by wave or wind action or precipitation for uncovered tanks Tank process flow and piping diagrams Description of tank instrumentation such as pressure, temperature, pH, level gauges and monitors Description of safety devices such as rupture discs and safety vents Description of pollution control devices 				,	

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TECHNOLOGY FOR THE STORAGE OF HAZARDOUS LIQUIDS

A State-Of-The-Art Review

NEW YORK STATE

DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF WATER BUREAU OF WATER RESOURCES

ALBANY, NEW YORK

JANUARY 1983

1. Pneumatic Testing

Air pressure (pneumatic) tests can be performed when: (1) non-flammable liquids are stored; (2) water or other suitable liquid is unavailable; and (3) water in the tank may contaminate the product stored. Air testing should be avoided if the tank is badly corroded [3]. Low-pressure storage tanks as well as atmospheric tanks can be tested with this method except that low-pressure tanks are tested at slightly higher pressures (i.e. up to 15 psig.), depending upon their design [3].

The primary disadvantage of pneumatic tests is that they are not sensitive enough to detect slow leaks and their precision is limited by the readings of a stick gauge and the amount of product in the tank. Greater accuracy can be achieved, however, when the tank is full or nearly full. Air pressure varies greatly with temperature and also with the vapor pressure of the liquid stored in the tank. Pneumatic tests are extremely hazardous and their use should be discouraged. There has been a fatality from pneumatic testing: a faulty gauge led to overpressurization and explosion of a tank. NFPA 329 states that "pressure tests with air shall not be used on tanks." [8]

Another important drawback of the pneumatic testing method is that large amounts of product may be forced out of the tank during the test without detection. For example, a 6000 gallon tank half-full with product and pressurized to 5 psig with air would lose over 78 gallons of product before a 0.5 psi loss in pressure can be detected. Pneumatic tests are not capable of compensating for thermal expansion or contraction that may mask large leaks. They may even cause a leak by overpressurizing the tank. Air pressure is acceptable for piping tests, however, and it is routinely used at levels of 50 psig with no adverse effects on sound piping systems. OSHA regulations require air pressure testing of submerged transfer pump piping every five years at maximum operating pressure.

2. Hydrostatic (Standpipe) Testing [6]

Hydrostatic tests involve pressurization of a storage system by connecting a standpipe to a completely filled tank. An additional head is placed on the tank by filling the standpipe, generally to an elevation such that a pressure of 5 psi is exerted at the bottom of the tank. A leak is detected by observing a drop of the liquid level in the standpipe. The magnitude of the leak can be determined by measuring this level drop. Hydrostatic tests are more accurate than pneumatic tests, but they still contain several sources of error. The expansion of the tank due to the pressure exerted during the test produces an apparent loss of product. The magnitude of this apparent loss depends on the tank deflection and can be substantial. Table 2.6-2 shows the magnitude of this loss for varying deflections on a given size tank.

The procedure will be useful where it is desired to test an underground storage tank and its connected piping for gross leaks. It is not adequate for detecting slow leaks nor for determining that a tank system is tight.

Often water is substituted for the product stored in the tank. However, water is more viscous than many hazardous substances (gasoline, light oils, etc.), and thus will leak out at a slower rate. This will bias the measurement of the actual leak rate.

Hydrostatic tests do not compensate for thermal expansion or contraction of the test liquid as it exchanges heat with the tank and surrounding soils. If the test liquid is colder than the stored product, it will expand when heated and thereby raise the level in the standpipe. This will also bias the level measurements on which the test is based. For example, if the contents of 6000 gallon tank are warmed 2°F, there will be a 7.2 gallon increase in volume. If the hydrostatic test is run for 2 hours, a leak of almost 90 gal/day will not be detected because no change in liquid level will occur.

In situations where an underground storage tank can be removed from service for several days, a hydrostatic test in which the test liquid is allowed to reach thermal and mechanical equilibrium with the tank can be very sensitive in detecting small leaks. The ability to isolate and test a tank over a period of several days may be likely in an industrial storage situation, whereas it may be impractical in testing gasoline service station tanks. Increased accuracy is available from hydrostatic testing where a long time period can be employed to permit reaching equilibrium conditions.

3. The Heath Petro-Tite Tank and Line Testing Systems (Kent-Moore Test) [15,16]

The Kent-Moore test is essentially a hydrostatic test that compensates for temperature, pressure and viscosity variation. This enables leaks as small as 0.05 gal/ hr to be readily detected. The Kent-Moore test consists of exerting a pressure head on the tank by means of a standpipe filled with the same liquid stored in the tank. This eliminates the error introduced by using a liquid of different viscosity. A pump is used to circulate the liquid in order to produce a uniform temperature throughout the tank. Using a thermal sensor, the temperature changes are precisely measured to account for expansion and contraction of the liquid. The volumetric measurements are then correspondingly adjusted for the changes in temperature. The Kent-Moore test includes a means of accurately measuring all product added or removed from the standpipe in order to maintain a constant head. By comparing the product added or drained with the volumetric changes anticipated due to temperature changes, it is possible to reliably detect a leak as small as 0.05 gal/hr.

For storage systems with submerged pumping, the Kent-Moore test must be run separately on the tank and on the piping to give good results. On suction delivery storage sytems, the Kent-Moore test checks the entire system simultaneously.

The Kent-Moore test requires several hours for completion with accurate results. Generally, during he first few hours of such a test there is a drop in the standpipe level attributed to the tank expanding because of the increase in internal presure. This is compensated for by reducing the tank pressure after 2 hours to control tank expansion. It has been determined by experimentation and field testing that by reducing the tank pressure after 2 hours further tank expansion does not take place. The Kent-Moore test can usually be completed in one working day. However, it is a relatively difficult test which must be performed by a skilled technician.

Because of the extensive shut-down time requirements and the level of skill involved, the Kent-Moore test is relatively expensive to perform.

4. The J-Tube Manomenter Test [15,16]

The J-tube leak detector developed by the Ethyl Corporation and field-tested by Texaco is essentially a manometer-type instrument that is capable of measuring very small drops in product level caused by tank leakage. The J-tube consists of a large diameter leg and a small-diameter leg that cause a magnification of an liquid level change as shown in Figure 2.6-1a. The detector can be placed in a tank through a 3-inch or larger fill-pipe, and the valves can be operated while the detector is in the tank. When placed in the underground tank, the detector primes as shown in Figure 2.6-1c. If the liquid level in the tank drops during the test period, the indicator fluid will be displaced as shown in Figure 2.6-1d. The ratio of the change in the indicator level to the change in the liquid level of the tank is the magnification factor and a measure of the rate of leakage. The lower valve is closed and the reservoir valve is opened just before removing the detector from the tank. This locks the indicator fluid in place while the leak detector is removed from the tank and a reading obtained as shown in Figure 2.6-1e.

The J-tube leak detector will detect leaks that cause variations in tank product level as small as 0.02 inches [7]. For a one-hour test with the product level in the middle of an 8,000 gallon tank, a change of 0.02 inches reflects a leak rate of 2.12 gallons per hour. Accuracy is dependent on the time span of the test. If, in the example above, the time span had been for a period of 10 hours instead of one hour, the leak rate would be 0.212 gallons per hour.

Possible effects of temperature and tank-end deflection variables are reduced by careful adherence to the test procedure. Instructions on the use of the equipment state that 1°F change in product temperature during the test will negate the results. Therefore, tests conducted within 24 hours after delivery should be avoided be-

cause temperature sometimes varies within that period. When the leak test is begun 24 hours or more after a delivery, the temperature usually does not vary 1°F from the beginning to the end of the test.

Also, temperature has been found to be stable at various depths from the top to the bottom of the tank. Rejection of any test with a 1°F temperature change means that error due to temperature is kept within small limits. For example, the error in 4,000 gallons of gasoline would be less than 2.4 gallons, or in 2,000 gallons of gasoline would be less than 1.2 gallons.

Tank-end deflection is not regarded as a serious problem because no unusual pressure is applied to the tank and also because the tank has at least 24 hours to physically stabilize in the ground before the leak test starts.

Advantages of the Texaco J-tube leak detector are:

- •It is relatively easy to transport, assemble and operate.
- •It does not intensify existing leaks or create new leaks, since no hydraulic or air pressure is used.
- Accuracy is a function of the time span of the test. The euipment will measure major leaks in a short period of time and relatively minor leaks in a longer period of time.
- It does not require a contractor crew to operate and no tank truck delivery is required.
- •Several tanks can be tested simultaneously.
- Underground tank, piping and dispenser openings need not be sealed.

One disadvantage of the J-tube leak detector is that it will not detect leaks above the product level in the storage tank.

While the J-tube leak detector was developed primarily for fuel storage tanks, it can be applied with other liquid products as well.

5. The Sunmark Leak Detection Test [8,9,10]

The Sunmark Industries Leak Lokator is an equipment system capable of detecting and measuring volume changes in underground storage systems. It was principally developed for use on gasoline storage tanks but could be used for other liquid storage systems as well. The equipment is capable of differentiating between piping leaks and tank leaks.

The basic equipment consists of a sensor, an analytical balance, and a chart recorder. The sensor is an open top, hollow tube filled with the liquid contained in the tank. It is suspended from the analytical balance and partially submerged in the tank liquid. As the liquid level in the tank changes, the buoyancy of the sensor also changes. This change of mass displacement measured by the analytical balance is an indication of volume changes within the tank. The chart recorder provides a graphical representation of volume change versus time.

References

- 1. American Petroleum Institute, Guide for Inspection of Refinery Equipment, Chapter II Conditions Causing Deterioration or Failures, American Petroleum Institute, 2101 L Street, N.W., Washington D.C. 20037, Second Ed., 1972.
- American Petroleum Institute, Guide for Inspection of Refinery Equipment, Chapter IV - Inspection Tools, American Petroleum Institute, 2101 L Street, N.W., Washington D.C. 20037, Second Ed., 1972.
- American Petroleum Institute, Guide for Inspection of Refinery Equipment, Chapter XIII - Atmospheric and Low-Pressure Storage Tanks, American Petroleum Institute, 2101 L Street, N.W., Washington D.C. 20037, Second Ed., 1973.
- 4. Fitzgerald, J.H., "Corrosion Control for Buried Service Station Tanks," Paper No. 52, The International Corrosion Forum Devoted Exclusively to the Portection and Performance of Materials, April 14-18, 1975, Toronto, Canada, National Association of Corrosion Engineers, Publications Department, 1440 South Creek, Houston, Texas 77084.
- Scully Electronics Systems, Technical Data Sheet on Scully WB100G Water Detector, Scully Electronic Systems, Inc., Industrial Way, Wilmington, MA 01887.
- National Fire Protection Association, Underground Leakage of Flammable and Combustible Liquids, NFPA 329, National Fire Protection Association, Batterymarch Park, Quincy, MA 02269, 1977.
- Anonymous, "Field Tests Promising on Texaco Underground Tank Leak Detector," Petroleum Marketer, Sept.-Oct. 1978
- Frick, R., Preliminary Review The Sunmark Leak Lokator, New York State Department of Environmental Conservation Memorandum, NYSDEC, 50 Wolf Road, Albany, N.Y. 12233, Aug. 26, 1980.
- Sunmark Industries, The Sunmark Leak Lokator Technical Bulletin, Sunmark Industries, P.O. Box 7368, Philadelphia, PA 19101.

- Anonymous, "Sunmark Leak Lokator Meets NFPA Standards," Petroleum Marketer, Sept.-Oct., 1980.
- 11. National Fire Protection Association, Flammable and Combustible Liquids Code, NFPA 30, National Fire Protection Association, Batterymarch Park, Quincy, MA 02269, 1980.
- Maresca, Jr., J.W., Evans, P.C., Measurement of Small Leaks in Underground Gasoline Storage Tanks Using Laser Interferometry, SRI International, Menlo Park, CA 94025, Oct. 31, 1979.
- Anonymous, "Leak Detection: Still Top Priority," Petroleum Marketer, June 1980.
- McLean, R.F., A Test in Progress Using a Kent-Moore Tank Systems Tightness Tester Model 1000, paper sponsored by the American Petroleum Institute and presented at the 43rd Annual Fire Department Instructors Conference in Kansas City, MO, March 30-April 2, 1971.
- Heath Consultants, Inc., Procedure Manual for the operation of the Petro Tite Tank Tester, Form #582 HPN 5124, Heath Consultants, Inc., 100 Tosca Drive, Stoughton, MA 02072.
- Heath Consultants, Inc., Procedure Manual for the operation of the Petro Tite Tank Tester, Form #583 HPN 5254, Heath Consultants, Inc., 100 Tosca Drive, Stoughton, MA 02072.
- 17. Ethyl Corp., "Ethyl" Tank Sentry (Underground Tank Leak Detector), Ethyl Corp., Petroleum Chemicals Division, 2 Houston Center, Suite 900, Houston, Texas 77002.
- ARCO Petroleum Products Co., "HTC Service Station Tank Leak Tester", ARCO Petroleum Products Co., Harvey Technical Center, 400 East Sibley Blvd., Harvey, IL 60426.
- National Association of Corrosion Engineers, NACE, 2400 West Loop South, Houston, Texas 77027.

EXHIBIT E

OPERATING RECORD

HAZARDOUS WASTE STORAGE FACILITY

MAIN - SYRACUSE AREA

OPERATING RECORD

HAZARDOUS WASTE STORAGE FACILITY

MAIN - SYRACUSE AREA

TABLE OF CONTENTS

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SECTION A - MASTER IDENTIFICATION FILE

SECTION B - MASTER WASTE PRODUCT RECORD FORM

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VOLUME II -

SECTION A - DAILY OPERATING LOG (Sample)

SECTION B - WEEKLY INSPECTION LOG (Sample)

EXHIBIT A

WASTE ANALYSIS PLAN

Before a hazardous waste can be treated, stored or disposed of, a detailed chemical and physical analysis of a representative sample of the waste must be obtained. The sampling and analysis must be repeated annually or more frequently if necessary to ensure that it is accurate and up to date.

The method of sampling shall be in accordance with Containerized Liquid Wastes Sampling "COLIWASA" as described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" published by the U.S. Environmental Protection Agency, Office of Solid Waste, a copy of which is included in Appendix I.

The methods of chemical analysis shall be in accordance with Tables 1, 2 and 3 of Appendix I. The specified analytical procedures are described in "Test Methods for Evaluating Solid Waste" (SW-846) published by the U.S. Environmental Protection Agency, Office of Solid Waste, a copy of which is on file with Plant Engineering, Environmental Systems, Building 9, Electronics Park.

The parameters for which each hazardous waste will be analyzed are the following:

- 1. Specific Gravity
- 2. Flash Point
- 3. pH
- 4. Organo-Chlorine
- 5. Sulfur
- 6. Primary Chemical Constituents Percentages of Composition of each

The results of the analysis and toxicity information for each hazardous waste generated shall be reported on the Waste Product Record Form, a copy of which is included in Appendix I. A completed Waste Product Record Form must be presented to Plant Engineering, Environmental Systems, before each hazardous waste will be accepted for storage in the main area storage facility.

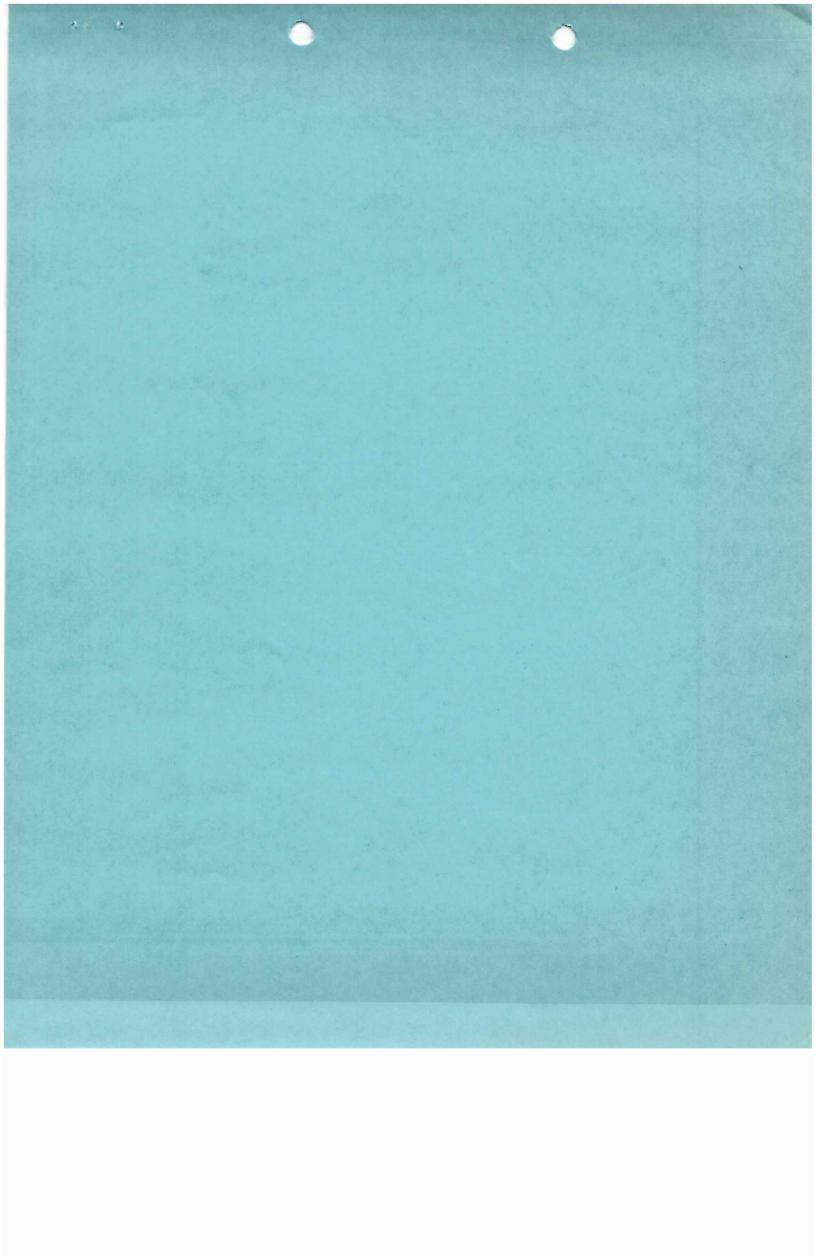


EXHIBIT B

Generator Waste Product Certification

Certification No.	GE Waste Description	Quantity	Weight	Date Labeled	Initials of Persons Responsible for Labeling	Date Transferred
Product R identifie to the be willfull	Record descriptions of my know	ption iden n is truel wledge and compositi	tified by y repres ability ons or p	y the G.E entative to deter	nsferred conforms to . code listed above. and is complete and a mine that no delibera exist and that all l	The accurate ate or
Date	Title*		ignature	<u>Pho</u>	one No.	
		_				

^{*}Foreman or Unit Manager.

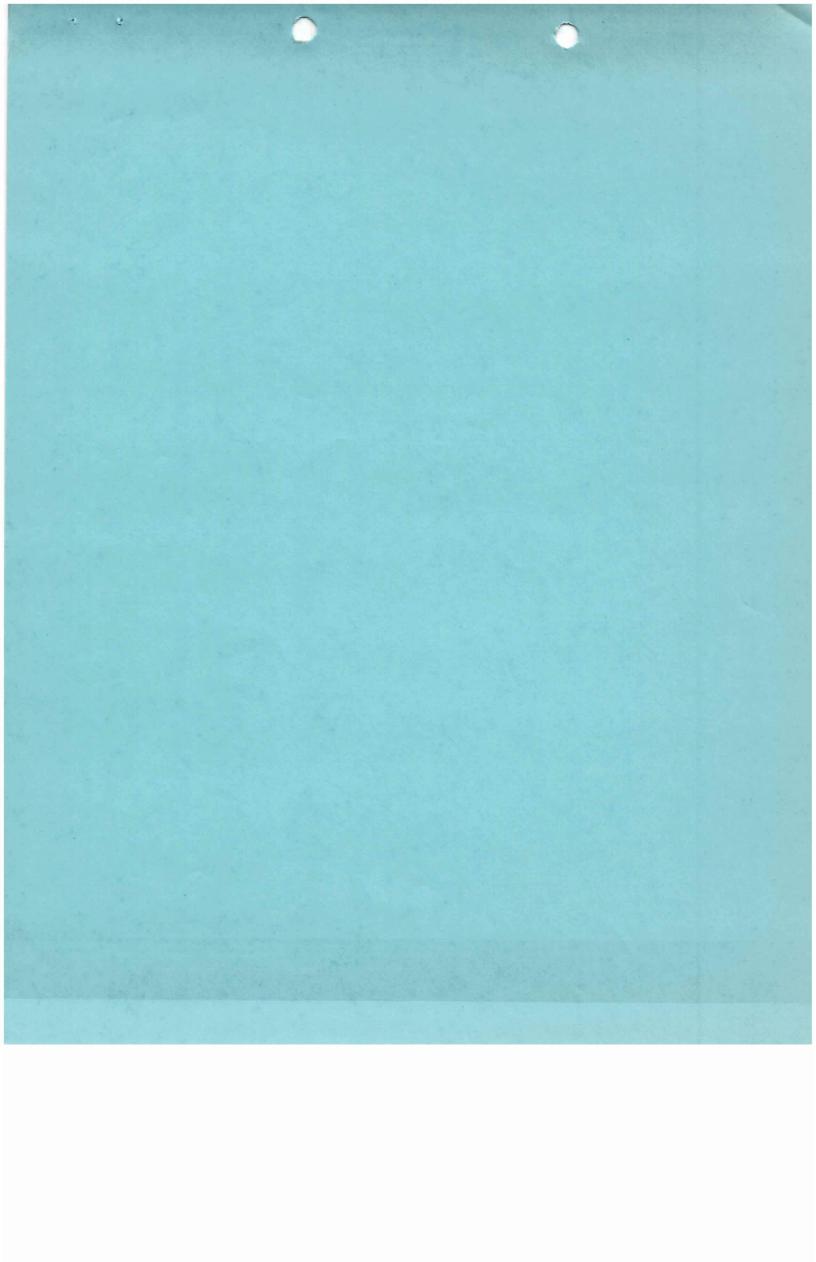


EXHIBIT C

RCRA

PERSONNEL

TRAINING

PROGRAM

Facility/Gas &	ant-Chemical Waste Suel Oil Facilities	Area Utility Operation	Supersede. Code No.	Job Code 655115
Department	Approved	Analyst	Job Value	Date
ESR&UO	C.B. Quinn	C.B. Quinn	R-15	

Receive all chemical waste from various Syracuse plant operations, see to PRIMARY FUNCTION proper containerization, segregate wastes per established instructions, make out necessary paper work for logs and transhipment for disposal via designated vendor. Load, unload trucks and operate fork lift truck.

Unload oil from supply trucks as necessary. Monitor gas and oil levels, call appropriate vendors for re-supply when necessary. Check periodically for proper oil, gas, pumping facilities operation.

Gauges, meters, fork lift truck, hand trucks, various racks and containers, miscellaneous hand bench tools, oil transfer pumps.

MATERIALS

Wide variety of acids, solvents, cylinder gases, pallets, crates, cartons, drums, assortment of material control forms, gloves, cleaning materials.

DIRECTION EXERCISED

May occasionally provide work direction to lower-rated employees. WORKING PROCEDURE

Work from generally prescribed directions, written and oral, use standard tools and equipment.

Load and unload drums and containers onto and from truck at storage facility. Inspect each container for type, condition, identification and proper labelling and accept only those meeting requirements, sign receipt for those accepted at facility and return to generator those which do not meet requirements. Properly segregate and store all received chemicals.

Inspect facility and contents daily to ensure proper storage is maintained and any leaks

are detected. Maintain log of such inspections.

Notify proper supervision when designated number of drums (currently 80) have accumulated for shipment by vendor to disposal site. Load material for disposal shipment. Prepare and maintain all required documentation.

Unload 2-3 loads per day of oil from vendor supply trucks during oil use periods.

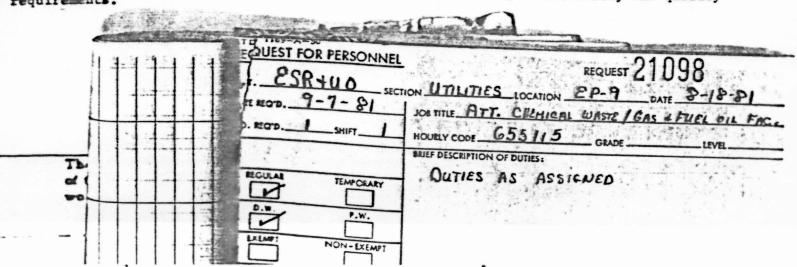
Fill liquid nitrogen tanks for Bldgs. 3 & 6.

Take periodic quantity readings on oil storage tanks; argon, oxygen, liquid nitrogen, hydrogen tanks, and propane cylinders. Call suppliers as necessary to resupply. Notify patrol of any week-end deliveries. Take natural gas reading used for B/10 boiler.

Check for any abnormal conditions in natural gas house, oil house, propane form; perform general housekeeping in gas house, switchgear room, and oil house pumping station.

Perform related or miscellaneous duties as assigned (e.g., clean oil strainer).

Keep facilities, materials, and work areas orderly, exercising care in their use and maintaining general good housekeeping practices and conforming to all safety and quality requirements.



RCRA - TRAINING RECORD

Raymond S. Merriett Name

Backup Attendant-Chemical Waste Facility Title

TYPE TRAINING	DATE COMPLETED
OJT - Familiarization with Storage Facilities and Operating Procedures by W. Fasce and D. Houde.	December 13-18, 1981
OJT - Familiarization and Instruction Regarding Recordkeeping by W. Fasce and D. Houde.	December 16-17, 1981
OJT - Familiarization with Labelling and Drum Types Used for Hazardous Waste Handling by W. Fasce and D. Houde.	December 17-18, 1981

Job Title Attend Facility/Gas &	ant-Chemical Waste Euel Oil Facilities	Area Utility Operation	Supersedes Code No.	Job Code 655115
Department	Approved	Analyst	Job Value	Date
ESR&UO	C.B. Quinn	C.B. Quinn	R-15	

Receive all chemical waste from various Syracuse plant operations, see to PRIMARY FUNCTION proper containerization, segregate wastes per established instructions, make out necessary paper work for logs and transhipment for disposal via designated vendor. Load, unload trucks and operate fork lift truck.

Unload oil from supply trucks as necessary. Monitor gas and oil levels, call appropriate vendors for re-supply when necessary. Check periodically for proper oil, gas, pumping facilities operation.

Gauges, meters, fork lift truck, hand trucks, various racks and containers, miscellaneous hand bench tools, oil transfer pumps.

MATERIALS

Wide variety of acids, solvents, cylinder gases, pallets, crates, cartons, drums, assortment of material control forms, gloves, cleaning materials.

DIRECTION EXERCISED

May occasionally provide work direction to lower-rated employees. WORKING PROCEDURE

Work from generally prescribed directions, written and oral, use standard tools and equipment.

Load and unload drums and containers onto and from truck at storage facility. Inspect each container for type, condition, identification and proper labelling and accept only those meeting requirements, sign receipt for those accepted at facility and return to generator those which do not meet requirements. Properly segregate and store all received chemicals.

Inspect facility and contents daily to ensure proper storage is maintained and any leaks

are detected. Maintain log of such inspections.

Notify proper supervision when designated number of drums (currently 80) have accumulated for shipment by vendor to disposal site. Load material for disposal shipment. Prepare and maintain all required documentation.

Unload 2-3 loads per day of oil from vendor supply trucks during oil use periods.

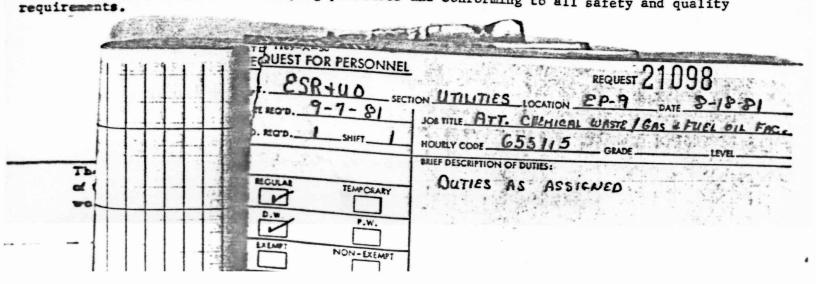
Fill liquid nitrogen tanks for Bldgs. 3 & 6.

Take periodic quantity readings on oil storage tanks; argon, oxygen, liquid nitrogen, hydrogen tanks, and propane cylinders. Call suppliers as necessary to resupply. Notify patrol of any week-end deliveries. Take natural gas reading used for B/10 boiler.

Check for any abnormal conditions in natural gas house, oil house, propane form; perform

general housekeeping in gas house, switchgear room, and oil house pumping station.

Perform related or miscellaneous duties as assigned (e.g., clean oil strainer). Keep facilities, materials, and work areas orderly, exercising care in their use and maintaining general good housekeeping practices and conforming to all safety and quality



RCRA - TRAINING RECORD

David J. Houde Name

Attendant-Chemical Waste Facility Title

TYPE TRAINING	DATE COMPLETED
OJT - Familiarization with Storage Facilities and Operating Procedures by W. Fasce and B. Pickard	October 5-9, 1981
OJT - Familiarization with Labelling and Drum Types Used for Hazardous Waste Handling by W. Fasce and B. Pickard.	October 5-30, 1981
Course - Lift Truck Operation by Clark Industrial Truck Division.	October 15, 1981
OJT - Familiarization and Instruction Regarding Recordkeeping by B. Pickard.	October 29-30, 1981
Course - Chemical Safety by ESR&UO Safety Committee.	July 12-15, 1982

	,		OIVIDUAL EXP	ERIE	NCE RECORD		
NAME _	FASCE		William E.		SOCIAL SECURITY NO	060-16-6923	
	(last)		(first) (in	itial)			
WORK E	XPERIENC	E					
Begin wi	th first posi	tion he	eld. Include military service and work with	other	companies.		
	ı		I	1	POSITION TITLE & DESCRIPTIO	on	
Date From (m To (mo	no/yr) Po	sition evel	GE Component, or Other Company and Location Immediate Manager(s)		Underline position title; then cachievements or significant con type of operation and industries it or subfunction. If managerial posof employees supervised.	tributions. Indicate products. nvolved. Show field or activity	
11/42-11/4	45 T.	Sgt.	8th A.F.	(Gunner to Sgt. Major o	of Unit & Acctg 1st Sgt.	
1/46-3/52	2		Schaeffer News Agency		Managed wholesale magazine and newspaper distributorship: billing, distribution etc.		
3/52-1/55	Gr.	. 7	Tube Dept., Auburn Warehous	1 -	Shipping Coordinator frailroad cars.	or all trucks and	
11/55-1/60	Gr.	. 10	Equipment Utilities & Relat		Leader-Office Suppl Posting, Stock Control		
1/60-11/65	Lv	4	Utilities Operation		upervisor - Letter Sh		
L1/65-4/69	Lv	6	R. L. Loesch Utilities Operation R. L. Loesch	T	uplicating-Advertisin yping-Overall complet Publishing Business.	g Books. Addressograph- e setup of Advertising	
/69-10/69	Lv	7	Utilities Operation R. L. Loesch		pecialist - Dispose o	f GE surplus material ugh sealed bids set up	
.0/69-12/7	l Lv	8	Utilities Operation R. L. Loesch	s		s, trash removal various	
.2/71-Prese	ent Lv	8	Syracuse Relations & Utilit: R. L. Loesch D. Lane M. M. Holt	Si Ma sc lc me ma bi hc Bu	hipping, Scrap & Salva isposal (Hazardous Was ain Mail Room with 6 m orting and distribution ocations in the Syracu- etering all mail, hand aterial with registered alling for special lar ourly employee to receated ailding 1,2,9 and 10 a	age, Trash & Solvent ste). Responsible for con-exempt employees ag mail to all G.E. ase Area. This includes ding classified and mail records, and ge mailings. Direct live all materials for	

proper disposal of hazardous waste materia
(If more room is needed, use Form CMMD-2A) Responsible for supervising and
maintaining a budget of approximately \$320.000.

reports and 10,000 items. Counsel Departments in accumulating and handling scrap, salvage and surplus materials to achieve maximum dollar

required to accumulate surplus materials to be sold. Initiate bid offerings to insure

_ Date _

Administer and account for trash hauling ard

return. Maintain warehouse facilities as

maximum interest and adequate bidding.

CNND-2A Rev. 6-72

Employee's Signature _

RCRA - TRAINING RECORD

William E. Fasce Name

Supervisor-Receiving, Shipping & Salvage Title

TYPE TRAINING	DATE COMPLETED
Course - Handling of Hazardous Materials (20 Hrs.) by North Syracuse Fire Department.	Jan-April, 1979
OJT - Familiarization and Instruction Regarding Recordkeeping by B. Pickard.	November, 1980
OJT - Familiarization with Labelling and Drum Types Used for Hazardous Waste Handling by B. Pickard.	November, 1980
OJT - Familiarization with Storage Facilities and Operating Procedures by B. Pickard.	January, 1981
Course - Hazardous Materials Transportation Workshop by UNZ & Co.	July 15, 1981
Course - Use of N.Y.S. Hazardous Waste Manifest by N.Y.S. Department of Environmental Conservation (D.E.C.).	April 1, 1982
Course - N.Y.S. Hazardous Waste Regulations by N.Y.S.D.E.C.	April 12, 1982
Course - Chemical Safety by ESR&UO Safety Committee.	July 12-15, 1982

POSITION OPENING SPECIFICATION

				PERSON	MEL K	EQUEST T		
DEADLINE	DATE	POSTING DA	TE		This	space fo	or R, M&OP u	se
rofessi		FOR EXEMPT JOB OP: s (CSP 4-41) must CADLINE DATE.						
TITIE	OF POSITION:							
IIILE		Plant Engineer - 1	Enwir	conmental Suct	am c			
REPORT		ridiit Liigilieel - I	711 V 11	Offinerial Bysic	-1115			
MDI OMI		Mgr., Plant Engi	neeri	ng & Construct	tion			
	LEVEL			OF OPENINGS	T		NEED BY DATE	
	11	l		1			ASAP	
EDUCAT	ION REQUIRED:	Technical degree	e at 1	Bachelor of Sci	ence	level.		
		Professional Eng	inee	ring license (S	tate c	of New York	:)	
SPECIA	L TRAINING DE	SIRED: Knowledge	of g	overnmental re	gulati	ons relatin	ng	
				al requirements				
(1)	Specific - r policies & r contacts. C Recommend Solve proble Design requ material bal	Compliance to governments. Incomparation of the practices. Interformed information of the programs. The programs of the programs of the programs of the programs of the program of the pro	clude ace mati Peri Jnder	es solid waste, with all govern on & direction form audits. Rerstanding and items.	, wate menta to Sys spons nterproblianc	er & air. Ral agencies racuse faci sibility increased of	ecommend are , EPO & other lities reps. ludes EP, FRP Federal Regist	& C
	Years - Activ	ity - Field - Pr	oduct	-)				
(0.8.)	5-10 years :	in environmental ater, air & solid	engi	neering field in	nvolvi	ng projects	5	
TRAITS	OR CHARACTERI	STICS DESIRED:						
		echnical environm	nent.	Ability to co	mmuni	icate inform	mation &	
		ople & programs.						
	agencies.							-
COMMENT	Scope of pos	sition interfaces Park, Court Stree			compo	nents at		
UBMITT	ED BY:			SECTION			DATE	
	P.O. Ouimb			Utilities &				

When completed, Forward to:

November 6, 1980

PROFESSIONAL PRACTICES CSP 4-41

Plant Services

Electronic Systems Division

R.O. Quimby

RCRA - TRAINING RECORD

Barry L. Pickard Name

Plant Engr-Environmental Systems Title

TYPE TRAINING	DATE COMPLETED
OJT - Wrote Area Hazardous Waste Management Plan.	November 10, 1980
OJT - RCRA Audit by M. Phillips, GE Environmental Protection Operation (EPO).	March 19, 1981
Seminar - Environmental Protection by GE EPO.	May 6-8, 1981
Course - Hazardous Materials Transportation Workshop by UNZ &Co.	July 15, 1981
Course - Use of N.Y.S. Hazardous Waste Manifest by N.Y.S. Department of Environmental Conservation (D.E.C.).	April 1, 1982
Course - N.Y.S. Hazardous Waste Regulations by N.Y.S. D.E.C.	April 12, 1982
Course Instructor - Chemical Safety by ESR&UO Safety Committee.	July 12-15, 1982
Seminar - Regulatory Workshop by GE EPO.	November 4, 1982

RCRA PERSONNEL TRAINING PROGRAM

All storage facility personnel must complete a program which teaches them proper operating and emergency procedures to ensure compliance with the Resource Conservation and Recovery Act (RCRA). The program, which must be successfully completed within six months of employment, shall be comprised of the following:

- 1. Familiarization with the Syracuse Area Hazardous Waste Management Plan, particularly the section regarding storage.
- 2. The consequences of not handling hazardous wastes properly.
- Actual operating techniques including:
 - a) Safe drum handling procedures
 - b) Inspection procedures
 - c) Equipment and facility maintenance procedures
- 4. Implementation of the contingency plan including:
 - a) Emergency procedures
 - b) Use of emergency equipment
- 5. Facility closure procedure

Additionally, all facility personnel must take part in an annual review of this training.

Training records shall be kept for at least three years showing the following:

- 1. Name of employee
- 2. Job title and description
- 3. Type of training and dates received
- 4. Description of training given

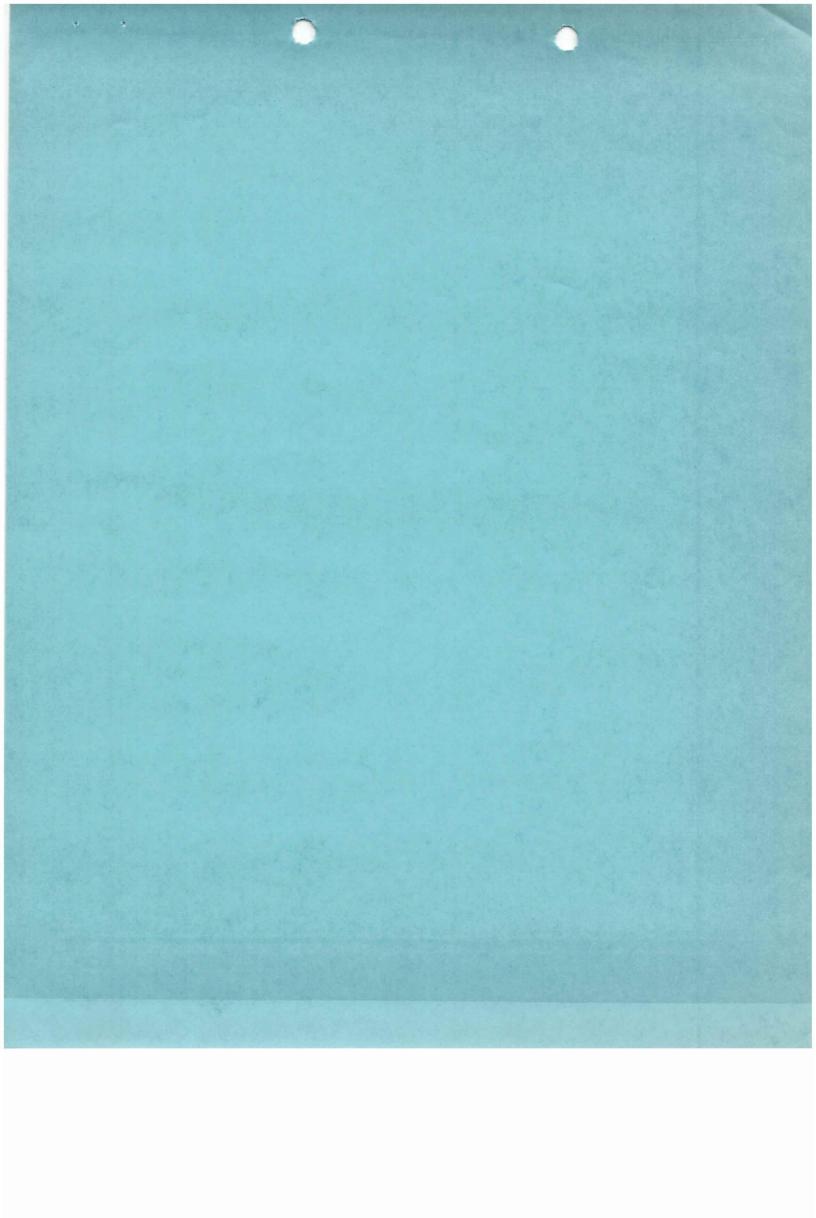
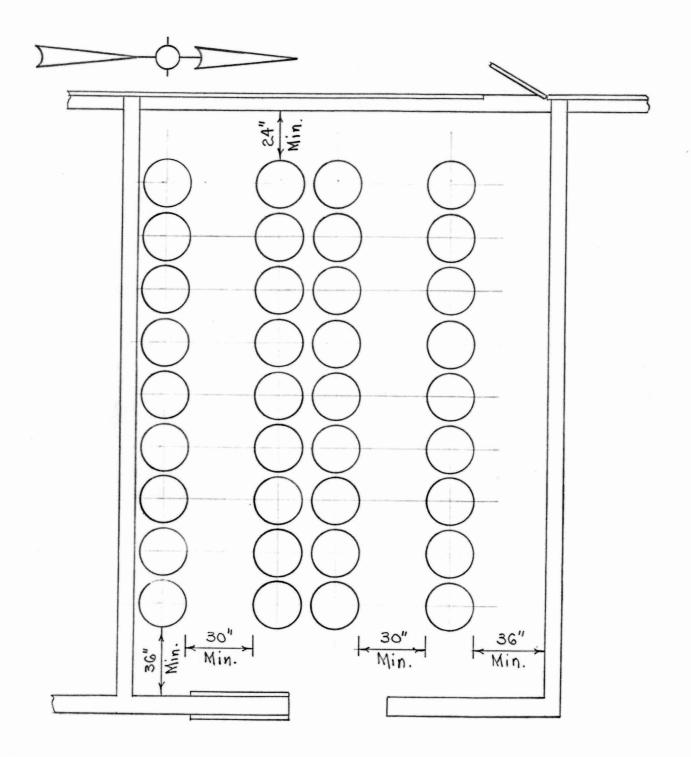


EXHIBIT D

IGNITABLES STORAGE AREA



OPERATING RECORD

VOLUME I

SECTION A

MASTER IDENTIFICATION FILE

OPERATING RECORD

VOLUME I

SECTION B

MASTER WASTE PRODUCT RECORD FORM

			MASTER IDENTIFICATION FILE				4/8/81
GE	CODE	D.O.T. SHIPPING NAME	G.E. WASTE DESCRIPTION	D.O.T. ID. NO.		D.O.T. LABEL	HAZARD CLASS
13	-00	Hazardous Waste, Liquid, N.O.S.	Lab Fungicide Waste	NA9189	None	None	ORM-E (E)
	-01	Waste Poison B, Solid, N.O.S.	Clarifier Sludge	NA2811		Poison	Poison B (E)
	-02	Waste Solvents, N.O.S.	Waste From Solvent Pool	NA1993		Flammable Liquid	Flammable Liquid (I)
13	-02	waste solvents, N.O.S.	waste from Sofvent Foot	MATSS	F005	rianmable Liquid	rianimable Liquid (1)
	-03	Waste Phosphoric Acid (RQ-5000)	Oakite 31-33%	UN1805	D002	Corrosive	Corrosive Material(C)
	-04	Waste Phosphoric Acid (RQ-5000)	Phosphoric Acid	UN1805	D002	Corrosive	Corrosive Material (C)
	-05	Waste Acid, Liquid, N.O.S.	Actane 82	NA1760		Corrosive	Corrosive Material (C.
	-06	Waste Sulfuric Acid, Spent (RQ-1000)	Copper Plating Solution	UN1832	D002	Corrosive	Corrosive Material(C)
	-07	Waste Ammonium Bifluoride Solution (RQ-5000)	Metex G-2	UN2817	D002	Corrosive	Corrosive Material(C)
	80-8	Waste Nitric Acid, 60% (RQ-1000)	Nitric Acid	UN2031	D002	Oxidizer, Corrosive	Oxidizer (C)
	-09	Waste Hydrochloric Acid Solution (RQ-5000)	Hydrochloric Acid	UN1789	D002	Corrosive	Corrosive Material(C)
	-10	Waste Ferric Chloride Solution (RQ-1000)	Ferric Chloride Etchant	UN2582	D002	Corrosive	Corrosive Material(C)
	-11	Waste Hydrochloric Acid Solution (RQ-5000)	Shipley Catalyst 9F	UN1789	D002	Corrosive	Corrosive Material(C)
	-12	Waste Sulfuric Acid, Spent (RQ-1000)	Sulfuric Acid	UN1832	D002	Corrosive	Corrosive Material(C)
13	-13	Waste Phosphoric Acid Solution (RQ-5000)	Oakite FH	UN1805	D002	Corrosive	Corrosive Material(C)
13	1-14	(Waste Sulfuric Acid, Spent 57% (RQ-1000)	(Bright Dip Acid	(UN1832	D002	Corrosive	Corrosive Material(C)
		(Waste Nitric Acid, 29% (RQ-1000)	(Bright Dip Acid	(NA1760	D002	Corrosive	Corrosive Material(C)
13	1-15	Waste Chromic Acid Solution (RQ-1000)	Alkalume 1744	`UN1755	D002	Corrosive	Corrosive Material (C)
	1-16	Waste Chromic Acid Solution (RQ-1000)	Irridite 60% Chromic Acid	UN1755	D002	Corrosive	Corrosive Material (C)
	3-17	Waste Nitric Acid, 65% (RQ-1000)	Actane 70	UN2031	D002	Oxidizer, Corrosive	Oxidizer (R)
	3-18	Waste Fluoboric Acid	Fluoboric Acid	UN1775	D002	Corrosive	Corrosive Material (C)
	-19	Waste Acid, Liquid, N.O.S.	Shipley Accelerator 19	NA1760	D002	Corrosive	Corrosive Material (C)
	3-20	(Waste Fluoboric Acid, 64%	(Solder Plating Sol.	(UN1775	D002	Corrosive	Corrosive Material (C)
()		(Waste Lead Fluoborate, 3% (RQ-5000)	(Solder Plating Sol.	(NA2291	None	None	ORM-B (E)
13	3-21	Waste Phosphoric Acid Solution (RQ-5000)	Oakite 31 50%	UN1805	D002	Corrosive	Corrosive Material (C)
	3-22	Waste Acid, Liquid Mixture, N.O.S.	E-Lab Acid Wastes	NA1760	D002	Corrosive	Corrosive Material (C)
13	3-23	Waste Alkaline, Liquid Solution, N.O.S.	Oakite 90	NA1719	D002	Corrosive	Corrosive Material (C)
	3-24	Waste Sodium Hydroxide Solution (RQ-1000)	Al-Chelate	UN1824	D002	Corrosive	Corrosive Material (C)
	3-25	Waste Isopropyl Alcohol Solution	Shipley Conditioner 1160	UN1219	D002	Flammable Liquid	Flammable Liquid (I)
	3-26	Waste Alkaline, Liquid Solution, N.O.S.	Stauffer Cleaner 600	NA1719	D001	Corrosive	Corrosive Material (C)
	3-27	Waste Alkaline, Liquid Solution, N.O.S.	Alkalume	NA1719	D002	Corrosive	Corrosive Material (C)
	3-28	Waste Alkaline, Liquid Solution, N.O.S.	Houghto-Clean 3501	NA1719	D002	Corrosive	Corrosive Material (C)
	3-29		1,1,1 Trichloroethane	UN2831	U226		
	3-30	Waste 1,1,1 Trichloroethane			U228	None None	ORM-A (T) ORM-A (T)
		Waste Trichloroethylene (RQ-1000)	Trichloroethylene	UN1710			
13	3-31	Waste Methylene Chloride Solution	Freon	UN1593		None	ORM-A (T) ORM-A (T)
	3-32	Waste Perchloroethylene	Perchloroethylene	UN1897	U210	None	ORM-A (T)
	3-33	Waste Methylene Chloride	Methylene Chloride	UN1593	U080	None Combustible Lieuid	ORM-A (T)
13	3-34	Waste Solvent Mixture, N.O.S.	Mixed Chlorinated Solvents	NA1993	None	Combustible Liquid	Combustible Liquia

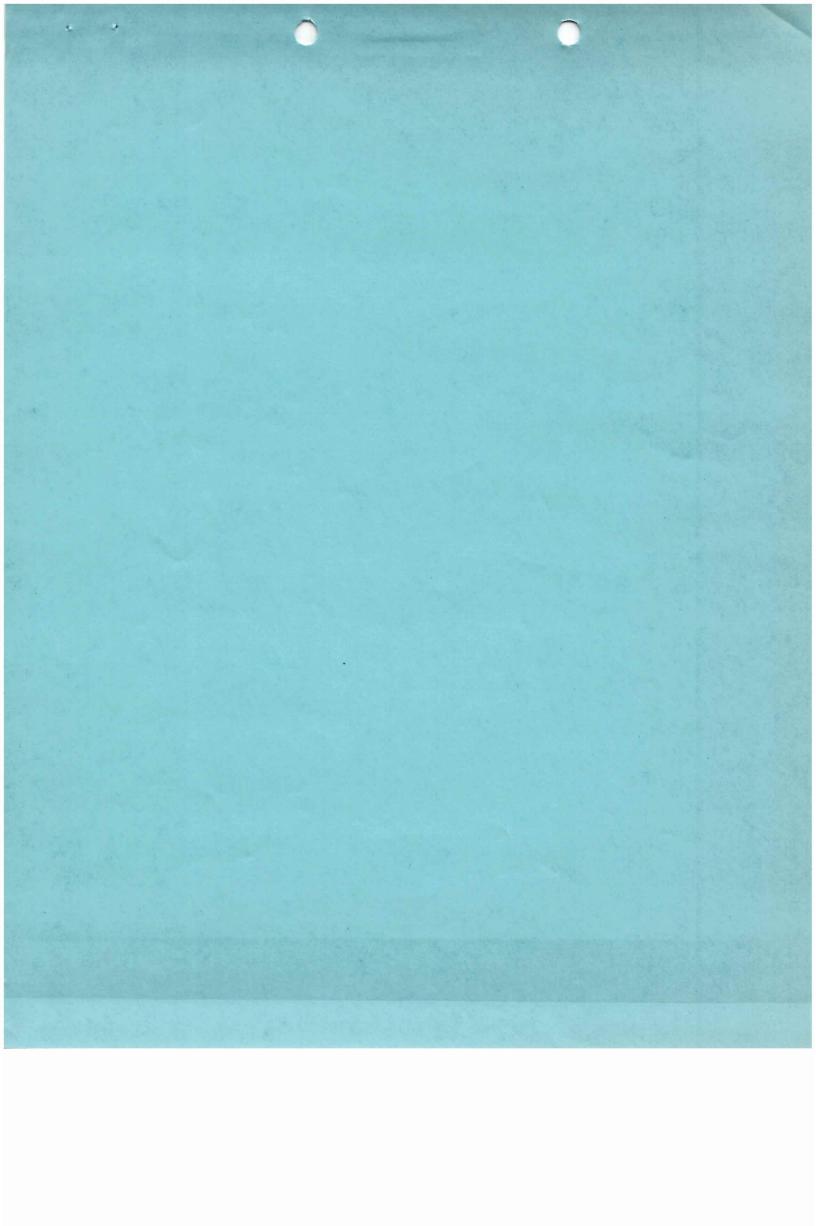
			MASTER IDENTIFICATION FILE				
9	E CODE	D.O.T. SHIPPING NAME	G.E. WASTE DESCRIPTION	D.O.T. ID. NO.		D.O.T. LABEL	HAZARD CLASS
	13-35	Waste Solvent Mixture, N.O.S.	E-Lab Solvents, Halogenated	NA1993	F001, F003, F005	Combustible Liquid	Combustible Liquid
	13-36	Waste Solvent Mixture, N.O.S.	Flammable Solvents	NA1993	F003,	Flammable Liquid	Flammable Liquid(I)
	13-37 13-38	Waste Isopropanol Solution Waste Solvent Mixture, N.O.S.	Epoxy Resin & IPA Waste Lacquer	UN1219 NA1993	D001 F003, F005	Flammable Liquid Flammable Liquid	<pre>Flammable Liquid (I) Flammable Liquid (I)</pre>
	13-39	Waste Solvent Mixture, N.O.S.	Flammable Solvents	NA1993	F003,	Flammable Liquid	Flammable Liquid (I)
	13-40	Waste Solvent Mixture, N.O.S.	Paint Thinner -GE1500	NA1993	F003, F005	Flammable Liquid	Flammable Liquid (I)
	13-41	Waste Solvent Mixture, N.O.S.	Aromatic Solvents	NA1993	F003, F005	Flammable Liquid	Flammable Liquid (I)
	13-42	Waste Solvent Mixture, N.O.S.	Paint Thinner-1500/1514	NA1993	F005	Flammable Liquid	Flammable Liquid (I)
	13-43 13-44 13-45 13-46 13-47 13-48 13-49 13-50 13-51 13-52 13-53 13-54	Waste Solvent Mixture, N.O.S. Waste Polychlorinated Biphenyls (RQ-10) Waste Petroleum Oil, N.O.S. Waste Oil, N.O.S. Waste Peanut Oil, NH. Waste Petroleum Oil, N.O.S. Waste Oil, N.O.S. Waste Paint Waste Arsenic, Solid Waste Oil Solution, N.O.S. Waste DAG, NH. Waste Solvent Mixture, N.O.S.	IPA-PYROL-ALPHA FLUX 611 PCB Transformer 0i1 Fuel 0il & H ₂ 0 Waste 0i1 Peanut 0i1 Lube 0il - Compressor 0il - Mixed 0il Silicone Contaminated 0il Silver & Hysol Paint Residue Solid Arsenic Waste Freon, Water, 0il Emulsion Waste DAG Mixed Solvents	NA1993 UN2315 NA1270 NA1270 None NA1270 UN1263 UN1558 NA1270 None NA1993	F005 B001 D001 D001 None D001 None D004 None None F001- F005	Flammable Liquid None Flammable Liquid Flammable Liquid None Flammable Liquid None None Poison None None Flammable Liquid	Flammable Liquid (I) ORM-E (T) Flammable Liquid (I) Flammable Liquid (I) None Flammable Liquid (I) Combustible Liquid Flammable Liquid (I) Poison B (E) Combustible Liquid None Flammable Liquid (I)
	13-55 13-56 13-57 13-58 13-59	Waste Poisonous Solid, N.O.S. (Lead) Waste Cyanide Solution, N.O.S. Waste Zinc Peroxide Waste Flammable Liquid, N.O.S. (Waste Lead Dross (Waste Zirconium Metal, Dry (Waste Sodium Hydroxide, Solution (RQ-1000) (Waste Formaldehyde Solution (RQ-1000)	Lead Sludge Cyanide Solution Mixed Oxides Lapping Slurry (Barium & Lead (Zirconium Titanate (Shipley Cuposit 523 (Shipley Cuposit 523	NA2811 NA1588 UN1516 UN1993 (NA1794 (UN2008 (UN1824 (UN2209	D008 F015 D001 D001 D008 D005 D002 V122	Poison Poison Oxidizer Flammable Liquid Poison Flammable Solid Corrosive None	Poison B (E) Poison B (E) Oxidizer (I) Flammable Liquid (I) ORM-C (E) Flammable Solid (I) Corrosive Material(C) ORM-A (T)

			MASTER IDENTIFICATION FILE				
				D.O.T.		D.O.T.	
G	SE CODE	D.O.T. SHIPPING NAME	G.E. WASTE DESCRIPTION	<u>ID. NO.</u>	NO.	LABEL	HAZARD CLASS
	13-61	Waste Solvent Mixture, N.O.S.	Oakite 96 (Solvent Cleaner)	NA1993	D001	Flammable Liquid	Flammable Liquid(I)
	13-62	Waste Paint	Spray Booth Residue	UN1263	D001	Flammable Liquid	Flammable Liquid(I)
	13-63	Waste Paint Mixture	E-Lab Inorganic Chemicals	UN1263	D001	Flammable Liquid	Flammable Liquid(I)
	13-64	Waste Acid, Liquid Mixture, N.O.S.	Mixed Acids w/dissolved Metals	NA1760	D002	Corrosive	Corrosive Material(C)
	13-65	Waste Sulfuric Acid, Spent (RQ-1000)	Sulfuric Acid	UN1832	D002	Corrosive	Corrosive Material(C)
	13-66	Waste Pyrrolidine Solution	Dilute Aqueous Waste N-Pyrol Rinse	UN1922	P075	Flammable Liquid	Flammable Liquid (H)
1	13-67	Waste Ferric Chloride Solution (RQ-1000)	Ferric Chloride Etch Solution (Dilute)	UN2582	D002	Corrosive	Corrosive Material(C)
1	.3-68	Waste Oiled Material	Oil Saturated Absorbent Material	NA9053	None	None	ORM-C
	13-69	Waste Potassium Hydroxide Solution (RQ-1000)	Oakite Stripper Q10	UN1814	D002	Corrosive	Corrosive Material (C)
	13-70	(Waste Sulfuric Acid, Spent (RQ-1000)	(Chromic Sulfuric Acid Etch	(UN1832	D002	Corrosive	Corrosive Material (C)
	\	(Waste Chromic Acid Solution (RQ-1000)	(Chromic Sulfuric Acid Etch	(UN1755	D002	Corrosive	Corrosive Material (C)
	13-71	Waste Cyanide Solution, N.O.S.	Cadmium Plate Solution	NA1588	F007	Poison	Poison B (R,T)
	13-72	Waste Sodium Chlorite Solution (less than 42%)	Sodium Chlorite Solution	UN1908	D002 D002	Corrosive	Corrosive Material(C) ORM-A (T)
	13-73	(Waste Methylene Chloride Solution, 50%	(Oakite VIS Strip	(UN1593 (UN1750	D002	Compacino	Corrosive Material(C)
	10 74	(Waste Chloroacetic Acid Solution, 25%	(Oakite VIS Strip PCB Contaminated Solid Waste	UN2315	B006	Corrosive None	ORM-E (T)
	13-74	Waste Polychlorinated Biphenyls (RQ-10)	Waste Roughing Pump Oil	NA1270	D001	None	Combustible Liquid
	13-75 13-76	Waste Oil, N.O.S. Waste Solvent Mixture, N.O.S.	Waste Solvent QC Lab	NA1993	F001-	Flammable Liquid	Flammable Liquid (I)
	13-70	waste solvent rinkture, N.O.S.	waste solvent qc Lab	MAIJJJ	F005	Transmable Eldara	Transmable Elquid (-)
	13-77	Waste Solvent Mixture, N.O.S.	Lacquer Wash Waste	NA1993	F003,	Flammable Liquid	Flammable Liquid (I)
	,,	naste servene mixture, more:	zaoquer muon muote		F005		
	13-78	Waste Hydrofluoric Acid Solution (RQ-5000)	Hydrofluoric Acid	UN1790	U134	Corrosive	Corrosive Material (C,T)
	13-79	Waste Sodium Chromate (RQ-1000)	Sodium Chromate Bricks	NA9145	None	None	ORM-E
	13-80	Waste Corrosive Liquid, N.O.S.	Remover 1112-A	NA1760	D002	Corrosive	Corrosive Material(C)
	13-81	Waste Sodium Chlorite Solution (less than 42%)	Copper Stripping Solution	UN1908	D002	Corrosive	Corrosive Material(C)
	13-82	Waste Corrosive Liquid, N.O.S.	Ammonium Persulphate	NA1760	D002	Corrosive	Corrosive Material(C)
	13-83	Waste Solvent Mixture, N.O.S.	Floor Dry w/Flam. Solvents	NA1993	F001-	Flammable Liquid	Flammable Liquid (I)
					F005		
	13-84	Waste Lead Dross	Frit Waste	NA1794	D008	None	ORM-C (E)
	13-85	Waste Polychlorinated Biphenyls (RQ-10)	Empty Drums Contaminated with PCB's	UN2315	B009	None	ORM-E (T)
	13-86	Waste Hydrogen Peroxide Solution (over 52%)	Hydrogen Peroxide	UN2015	U096	Oxidizer, Corrosive	
	13-87	Waste Hydrogen Peroxide Solution (8% - 40%)	Floor Dry w/Hydrogen Peroxide	UN2014	U096	Oxidizer	Oxidizer (R)
	13-88	Waste Hydrofluoric Acid Solution (RQ-5000)	Powdered Lime w/Hydrofluoric Acid	UN1790	U134	Corrosive	Corrosive Material (C,T)
s_i	13-89	Waste Asbestos	Asbestos Pipe Insulating Powder	None UN1906	U013 D002	None Corrosive	ORM-C Corrosive Material(C)
	13-90	Waste Acid Sludge	Acid Sludge From Pipes & Trenches	0111300	טטטע	Corrosive	corrosive material (c)
			In Sewer System				

A/8/8. Rev 12/14/8.

		MASTER IDENTIFICATION FILE			Rev 12/14/8.
GE CODE	D.O.T. SHIPPING NAME	G.E. WASTE DESCRIPTION	D.O.T. EPA ID. NO. NO.	D.O.T. LABEL	HAZARD CLASS
GE CODE	D.O.T. SHITTING HAME	G.E. WASTE BESCRIFTION	1D. NO. NO.	LABEL	TIAZARD CEASS
13-91	Waste 1,1,1 Trichloroethane and Lubricating Grease	Lubricating Grease & 1,1,1 Trichloroethane	UN2831 U226	None	ORM-A (T)
13-92	Waste Sodium Hydroxide, Dry Granular	Waste Sodium Hydroxide	UN1823 D002	Corrosive	Corrosive Material (C)
13-93	Waste Nickel Chloride Solution (RQ-5,000)	Nickel Plating Solution	NA9139 F006	None	ORM-E (T)
13-94	Waste Sodium Hydrogen Sulfate Solution	Shipley Cataprep 404 Solution	UN2837 D002	Corrosive	Corrosive Material (C)
13-95	(Waste Sodium Hydrogen Sulfate Solution	Shipley Cataposit 44	(UN2837 D002	Corrosive	Corrosive Material(C)
((Waste Hydrochloric Acid Solution (RQ-5,000)		(UN1789 D002	Corrosive	Corrosive Material(C)
.3-96	Waste Dieldrin Solution (RQ-1)	Dieldrin 18E	NA2761 P037	None	ORM-A (H)
13-97	(Waste Sulfuric Acid, Spent (RQ-1,000)	Floor Dry with Misc. Acids	(UN1832 D002	Corrosive	Corrosive Material (C)
	(Waste Potassium Dichromate (RQ-1,000) Waste Acetic Acid Solution (RQ-1,000)		(NA1479 DO07	None	ORM-A (E)
13-98	Waste Acetic Acid Solution (RQ-1,000)	Mixed Organic Acids	UN2790 D002	Corrosive	Corrosive Material (C)
13-99	Waste Alkaline, Liquid Solution, N.O.S.	Alkastrip 99A	NA1719 D002	Corrosive	Corrosive Material (C)
13-100	See Listed Inventory	Lab Disposal Wastes	N/A N/A	None	None
13-102	Waste 20% 2,4-D	2,4 D	NA2765 D016	None	ORM-A (E)
13-103	Waste Water Wash Paint Sludge	Water Wash Paint Sludge	None None	None	None
13-104	(Charcoal, Wood Granulated	Activated Charcoal With	NA1361 D001	Flammable Solid	Flammable Solid (I)
	(Trichloroethylene (RQ-1000)	Trichloroethylene	UN1710 U228	None	ORM-A (E)
13-105	Waste Poisonous Solid, N.O.S. (Lead)	Silicone Molding Compound	NA2811 D008	Poison	Poison B (E)
13-106	Waste Poisonous Solid, N.O.S.	Sludge from TPO WWTP	(NA1794 D008	Poison	Poison B (E)
	(Lead, Barium, Cadmium)	•	(UN2008 D005	Flammable Solid	Flammable Solid (I)
	• • • • • • • • • • • • • • • • • • • •		(NA2570 D006	None	ORM-E (E)
13-107	(Waste Nitric Acid Solution (RQ-1000)	White Etch With Arsenic	(UN2031 D003	Oxidizer	Oxidizer (R)
·	(Waste Hydrofluoric Acid Solution (RQ-5000)		(UN1790 D002	Corrosive	Corrosive Mat'l (C)
	(Waste Arsenic Acid Solution		(UN1553 D004	Poison	Poison B (E)
13-108	Waste Polychlorinated Biphenyls (RQ-10)	PCB Capacitors (Max 400#/Dr.)	(UN2315 B007	None	ORM-E (T)
13-110		PCB Capacitors (Max 750#/Dr.)	UN2315 B007	None	ORM-E (T)
13-111	Waste Polychlorinated Biphenyls (RO-10)	PCB Capacitors (Max 428#/Dr.)	UN2315 B007	None	ORM-E (T)
13-112	Waste Corrosive Liquid, N.O.S.	Oakite LNC	UN1760 D002	Corrosive	Corrosive Mat'1 (C)
13-113	Turco Fluro-Check Rinse Water	Turco Fluro-Check Rinse Water	None None	None	None
13-114		Nickel Sulfamate Plating Solution	None None	None	None
13-115	Waste Dioxane	1,4 Dioxane	UN1165 U108	Flammable Liquid	Flammable Liquid (I)
		•			

NOTE: GE Code No.'s (13-14 (13-20 (13-59 (13-60 (13-70 (13-73 (13-95 (13-97 (13-104 (13-107 These GE Waste Descriptions each have a composition of two DOT shipping names, therefore, list both DOT names, DOT ID No.'s, EPA No.'s, labels and hazard codes unless they are the same.



OPERATING RECORD

VOLUME I

SECTION C

WASTE PRODUCT RECORD FORMS

(SAMPLE)

W STE PRODUCT RECORD

FRONTIER CODE

FRANTIER

4626 Royal Avenue Niagara Falls, N.Y. 14303 716 - 285-8208

EPA I.D. # NND059305120

COMPANY NAME	SITE ADDRESS		
General Electric Company BUSINESS ADDRESS (IF DIFFERENT FROM SITE)	Electroni	cs Park #	6, Syracuse, NY
PO Box 4840, EP-6, Syracuse, NY 13221	E.J. Grif	fin	(315) 456-2080
NAME OR DESCRIPTION OF WASTE		Ti	OT SHIPPING NAME
Waste Pen Strip NPX		10	Waste Methylene Chloride/Waste
QUANTITY GALS. P MONTH PACKING OT XDRUMS E YEAR QUANTITY GALS. P MONTH PACKING OT XDRUMS E YEAR QUANTITY GALS. P MONTH PACKING OT XDRUMS BULK D		STEEL STAINLES	GE Formic Acid
PHYSICAL STATE (CIRCLE APPROPRIATE BLOCKS) EPA HA	ZARDOUS WASTE NO	.(S)	
SOLID LIQUID SEMI-SOLID			
SPECIFIC GRAVITY			
	SITION (ACCOUNT		
LOW MEDIUM HIGH 70	<u>% Dichloro</u>		
FLASH POINT (*F) <100 100-140 > 140 NONE 25	% Formic A		Chloride) _%
DH (CIRCLE RANGE) 1 2 3 5 7 9 11 >	%		%
NONE 2 MULTI %	%		%
SOCIDS % TOTAL % DISSOLVED WEIGHT VOLUME % SUSPENDED % SETTLEABLE	%		%
BTUILB (THOUSANDS) ORGANO CHURRINE SULFOR			
<1 15 59 912 >12 OTR (17 >17 OTR (18 >18)	%		. %
LOW MEDIUM HIGH LOW MEDIUM HIGH XINGESTION X DERMAI	GINHALATION D	ADUATIC DBID-ACC	ATTACH INFORMATION
DESCRIBE DIE PROCESS THAT SENERATES THIS WASTE -	<u>Мт.</u>	Пете Пете	
DESCRIBE THE PROCESS THAT GENERATES THIS WASTE			Flammability
The Pen Strip NPX is used to remove the	epoxy coated	Health	Reactivity
rimbands from tubes which are being salva	aged. The		Special Instructions
dichloromethane (Methylene Chloride) will	l dissolve		* = 1
PVC piping. Attached is a Material Safet	y Data Shee	t	
for Pen Strip NPX.			
		,	
PLEASE ATTACH ANY ADDITIONAL HANDLING AND HAZARD INFORMATION.	TOXICOLOGY REP	ORTS, OSHA DAT	A SHEETS, ETC.
I HEREBY CERTIFY THAT THE ABOVE AND ATTACHED DESCRIPTION IS COMP AND ABILITY TO DETERMINE THAT NO DELIBERATE OR WILLFULL OMISSION: ALL KNOWN OR SUSPECTED HAZARDS HAVE BEEN DISCLOSED.			
DATE TITLE SIGNATA	YREA 'OO .		
Facilities Engineer //	1. 24. 00		

Form Approved Budget Bureau No. 44-R1387 Approval Expires April 30, 1971

U.S. DEPARTMENT OF LABOR

WAGE AND LABOR STANDARDS ADMINISTRATION
Bureau of Labor Standards

MATERIAL SAFETY DATA SHEET

SECTION I						
MANUFACTURER'S NAME PENETONE CORPORATION	EMERGENCY TELEPHONE NO. 201 567-3000					
ADDRESS (Number, Street, City, State, and ZIP Code) 74 Hudson Avenue Tenafly, N.J.	07670					
CHEMICAL NAME AND SYNONYMS N.A.	TRADE NAME AND SYNONYMS Pen Strip NPX					
CHEMICAL FAMILY Remover of organic coatings	FORMULA N.A.					

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST	1		ALLOYS		
VEHICLE	1		METALLIC COATINGS		
SOLVENTS Dichloromethane	70	100	FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES		•	OTHERS		
OTHERS					
HAZARDOUS MIXTURE	S OF O	THER LIQ	UIDS, SOLIDS, OR GASES	%	TLV (Units)
1	· · · · ·			25	5
Form	1C A	cld		123	

	SECTION III	PHYSICAL DATA		44.3		
BOILING POINT (F.)	110	SPECIFIC GRAVITY (H20=1)			1.2	26
APOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	105°C	- 2	hrs.	72
APOR DENSITY (AIR=1)	4	EVAPORATION RATE				
SOLUBILITY IN WATER	Partial					

	*			RE AND EXP				el Uel
FLASH POINT	(Method used)	None (C. O. C.	T.O.C.	FLAMMA	.A.		
EXTINGUISHIN	NG MEDIA	N.A.						
SPECIAL FIRE	fighting PRO gas mask	CEDURES .S						1
UNUSUAL FIR	E AND EXPLOSI	ON HAZARD	s Deco	ompositio	n can	occur	producing	hydrogen
			toxic					

SECTION V HEALTH HAZARD DATA THRESHOLD LIMIT VALUE See Section II EFFECTS OF OVEREXPOSURE Weakness, headache, dizziness, rapid breathing loss of consciousness in extreme cases. Skin and eyes:can cause severe burns upon contact. EMERGENCY AND FIRST AID PROCEDURES Overexposure - remove to fresh air, apply artificial respiration if necessary. Call physician. Eyes: immediately wash with water for 15 min. see a physician. Skin: immediately wash with water and sodium bicarbonate solution. Consult a physician in case of burns. SECTION VI REACTIVITY DATA CONDITIONS TO AVOID STABILITY UNSTABLE STABLE INCOMPATABILITY (Materials to avoid) Do not mix with alkalies. Damages rubber and plastics HAZARDOUS DECOMPOSITION PRODUCTS None

SECTION VII SPILL OR LEAK PROCEDURES STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Provide adequate ventilation. Rinse with water; avoid contact with eyes, skin, and clothing. Immediately remove contaminated clothing, wash skin thoroughly. Wash clothing before reuse. WASTE DISPOSAL METHOD Obtain services of a licensed disposal company as per RCRA

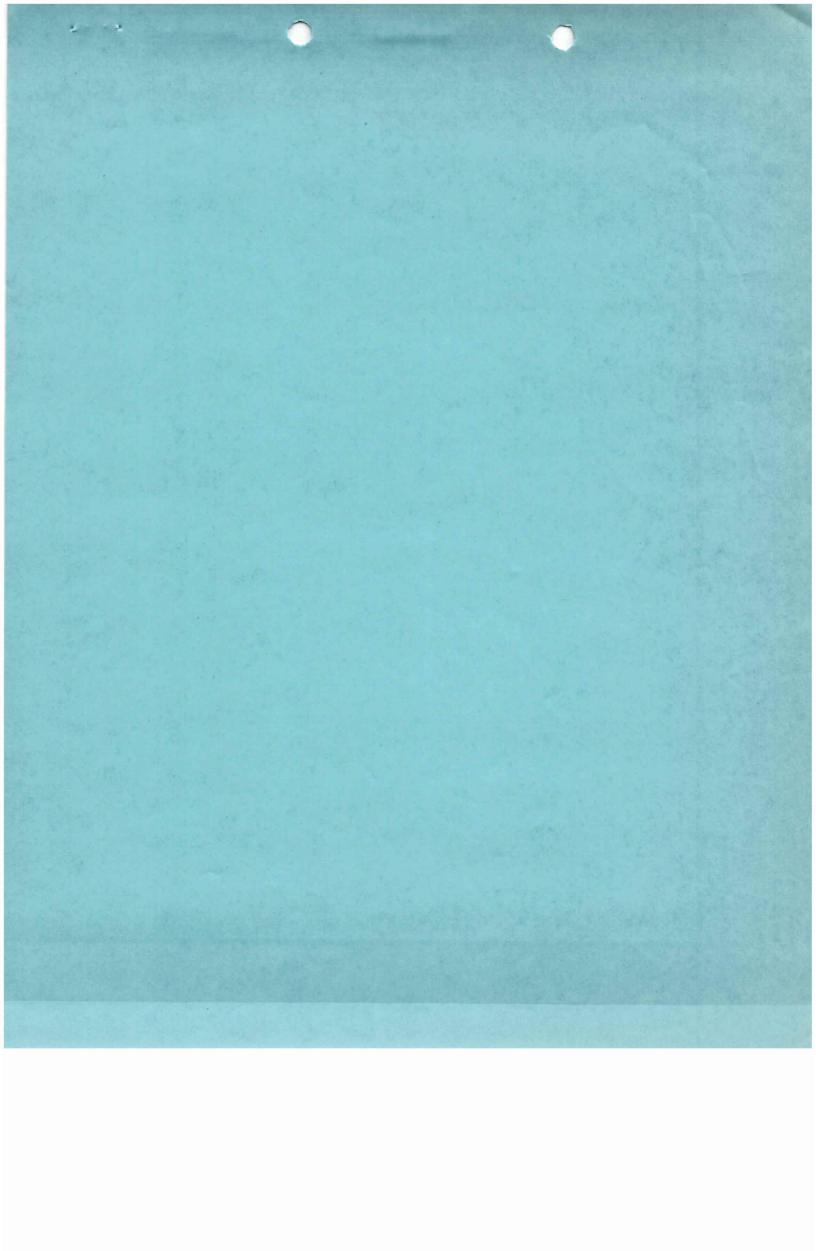
MAY OCCUR

WILL NOT OCCUR

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

tion which the party	SECTION VIII SPECIAL	PROTECTION IN	FURMATION	The state of the s	
RESPIRATORY PROT	ECTION (Specify type) Not normal1	y required.			
VENTILATION LOCAL EXHAUST level exhaust fans		ਈੰਊ⁴in well ventilated a			
	MECHANICAL (General)		OTHER		
PROTECTIVE GLOV	Neoprene rubber gauntlets	Goggles,	glasses	or face shi	eld
OTHER PROTECTIVE	gauntlets		glasses	or face shi	elo

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Store in tightly closed containers in a cool area. Avoid skin, eye and clothing contact with product. OTHER PRECAUTIONS When opening container, vent drum slowly to release possible internal pressure. Keep face away when opening. Do not heat the product.



OPERATING RECORD

VOLUME II

SECTION A

DAILY OPERATING LOG

(SAMPLE)

DAILY OPERATING LOG

HALARDOUS WASTE STORAGE FACILITY

LOCATION: Chem Annex of E.P. 7

BY: D. Houde 58-1-S/ :3TAD

GE WASTE CODE	GENERATOR COMPONENT	QUANTITY RECEIVED	DATE RECEIVED	DATE SHIPPED
13-30	TCPD	10	S@-1-S/	12/9/02
13-29	TPO	١		56/9/51
13-31		1		58/9/51
13-41		١		38/9/31
13-54		١		12/9/82
13-55		4		12/9/02
13-66		1		12/9/08
13-69		G		12/9/82
\3-34	2PD	2		50/0/21
13-64		\		12/9/82
13-81		1		12/9/82
Total		29		

B. F. Putra

OPERATING RECORD

VOLUME II

SECTION B

WEEKLY INSPECTION LOG

(SAMPLE)

WEEKLY INSPECTION LOG

HAZARDOUS WASTE STORAGE FACILITY

LOCATION: EP7 Chem-Annex BY: BL Pickard DATE: \2 3 82 **REMARKS** YES NO **ITEMS** (if no, explain) **DRUMS** X PROPER TYPES? PROPER CONDITION? X X PROPER LABELS? PROPER LOCATION? X FACILITY RACKS OK? X DIKES OK? X LEAKAGE X DRUMS? (if yes, explain) FACILITY?

> Bang C. Pichard (signed)

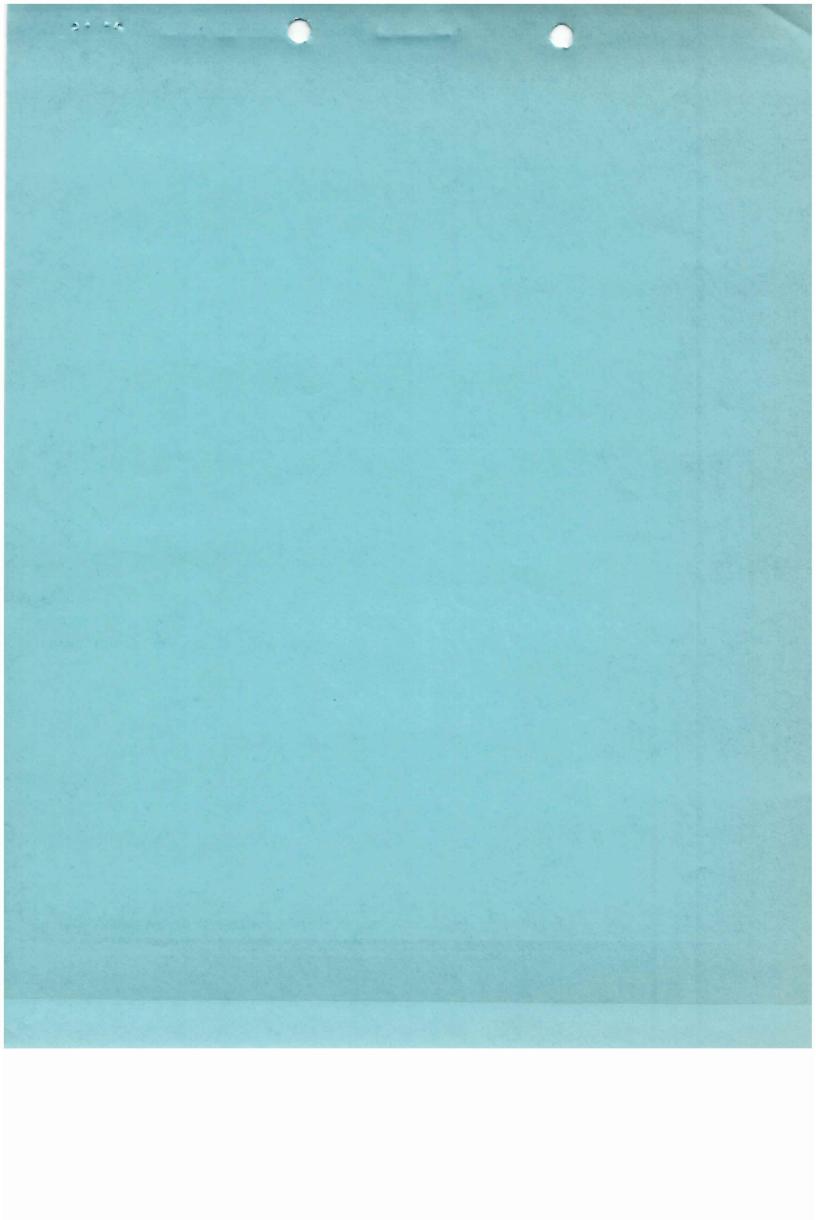


EXHIBIT F

FACILITY CLOSURE PLAN

The following closure plan must be prepared and kept on file at the storage area. The plan must be submitted at least 180 days before the date closure is started.

- 1. How All waste within the storage area at the time of closure must be shipped off-site for disposal or transferred to another storage area. Any waste residue remaining in the area shall be identified, cleaned up, properly drummed and disposed of as a hazardous waste. Clean-up shall be accomplished by washing down of all walls, ceilings, floors, racks and equipment such as exhaust system duct work contaminated during the course of facility operation.
- When Closure will commence when waste is no longer brought to the facility for storage because of a change in hazardous waste handling procedures.
- 3. The maximum capacity of the storage facility is 168 drums.
- 4. The schedule for final closure based on the last date of receipt of hazardous waste by the facility is:
 - a) Completion of removal of stored wastes 30 days after last receiving waste.
 - b) Completion of clean-up effort 60 days after last receiving waste.